

Our Reference: UMJ-101-A (UM-1476)

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Peter X. Ma  
Serial Number: 09/255,963  
Filing Date: February 23, 1999  
Examiner/Art Group Unit: Sumesh Kaushal, Ph.D./1633  
Title: THREE-DIMENSIONAL HYDROGEL/CELL SYSTEM

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Zeta  
7-14-02

**COMMUNICATION**

Assistant Commissioner of Patents  
Washington, D.C. 20231

Sir:

If any charges or fees must be paid in connection with the following communication, they may be paid out of our Deposit Account No. 50-2100.

The Office Action dated March 1, 2002 has been received and carefully reviewed. Please revise the above-identified patent application as indicated below. Entry of this Communication is respectfully requested.

In the Claims:

1. A method comprising the steps of:  
mixing an alginate salt and a source of calcium ions to provide a mixture;  
adding a calcium releasing compound to the mixture to provide a three-dimensional crosslinked hydrogel system; and  
selectively controlling shrinking, swelling or maintaining of the hydrogel system by varying a calcium ion concentration of a medium into which the hydrogel system is introduced.
2. The method of Claim 1, further comprising the step of culturing the three-dimensional crosslinked hydrogel system in the medium for growing cells in vitro.